

Prescott AMA Exempt Well Study Group Recommendations

Issue:

An exempt well is defined as a well that has a pump with a maximum pumping capacity of 35 gallons per minute or less which is used to withdraw groundwater for non-irrigation uses¹. Concern about the administrative burden of regulating thousands of small wells and the belief that they would have a negligible impact on the aquifer led the state legislature to exempt this category of groundwater use from the 1980 Groundwater Management Act². Exempt wells contribute to groundwater overdraft in the Prescott Active Management Area more so than in other AMAs, placing the long-term viability of its aquifers at greater risk and impeding the ability to reach the AMA's management goal of safe-yield by 2025³.

Subdivisions inside an AMA are required to meet the Assured Water Supply (AWS) requirements per A.R.S. § 45-576. The term "Assured Water Supply" means that sufficient water of suitable quality will be physically, continuously and legally available to meet the anticipated water needs for at least one hundred years. The definition of a subdivision is land divided or proposed to be divided for the purpose of sale or lease into six or more lots⁴. Therefore, divisions of land into five or fewer parcels, referred to as lot splits, are not required to have an AWS or a public report⁵, unless they are part of a series of lot divisions that constitute a "common promotional plan." Additionally, ADWR rules exempt certificate of AWS applicants for dry lot development of 20 or fewer lots from the requirement to make groundwater use consistent with the management goal for the Active Management Area (AMA)⁶. Dry lot developments are defined as a development or subdivision without a central water distribution system⁷. The exempt classification of these wells, along with Arizona Department of Water Resources' (ADWR) rules for determining an AWS, has resulted in an increase of dry-lot subdivisions and lot splits that in most cases require an individual well on each lot.

Safe-Yield, Lot Splits, Subdivisions and Exempt Wells

On January 12, 1999, the Director of ADWR declared the Prescott AMA to no longer be in safe-yield⁸. Safe-yield is a water management goal which attempts to achieve and thereafter maintain a long-term balance between the annual amount of groundwater withdrawn in an AMA and the annual amount of natural and artificial recharge. In the Prescott AMA, exempt

¹ A.R.S 45-402(8)

² Prescott Active Management Area Groundwater Users Advisory Council Safe-Yield Subcommittee (2006), Final Report on Safe-Yield Impediments, Opportunities, and Strategic Directive.

³ Post-2025 AMAs Committee, June 17, 2020, Exempt Wells Issue Brief.

⁴ A.R.S 32-2101(57)

⁵ A.R.S. 32-2181

⁶ Arizona Administrative Code, R12-15-722(H)

⁷ A.A.C. R12-15-701(36)

⁸ AZ DEPT OF WATER RESOURCES. Third Management Plan for the Prescott Active Management Area 2000-2010 at 1-6, [PrescottAMA_3MP.pdf \(azwater.gov\)](#).

well demand was estimated at more than 2,700 acre-feet per year from over 13,000 exempt wells (Figure 4) in 2019, and represents the third largest groundwater demand behind withdrawals by Prescott and Prescott Valley^{9, 10}. In accordance with the exempt well statute, ADWR grants permits to drill exempt wells, which can pump groundwater so long as the pump capacity is less than or equal to 35 gallons per minute. Exempt wells may exceed the volume that can be obtained from a water provider's water service connection.

Assured Water Supply Determinations and Consistency with Management Plan and Goal

As stated previously, exempt wells are exempt from water management regulations such as metering, reporting, conservation requirements and demonstrating withdrawals are consistent with the AMA management goal¹¹. Allowing the continued drilling of exempt wells in the Prescott AMA conflicts with the management plan of the AMA and achievement of the management goal of the AMA because it allows additional groundwater withdrawals in the AMA while the AMA is attempting to meet the long-term goal of safe-yield.

Public report issuance and plat approval for new subdivisions inside the Prescott AMA require either a certificate of assured water supply or commitment of service by a designated provider.

Subdivisions of 50 or fewer lots do not need to demonstrate consistency with the management plan of the AMA, but must demonstrate all other AWS requirements¹².

Dry-lot subdivisions of 20 or fewer lots do not need to demonstrate consistency with management goal of the AMA, but must demonstrate all other AWS requirements.

The Director of ADWR concluded in the January 12, 1999 Decision and Order, that additional groundwater to future subdivisions would threaten the reliability of those future subdivisions, as well as to existing groundwater users. The Prescott AMA, therefore, was found to be no longer at safe-yield and water providers and future subdivisions which apply to the Department for an AWS will be required to acquire renewable water to meet the subdivision's needs in accordance with A.A.C. R-12-15-705(F), as that rule was amended by 1998 Arizona Session Laws

⁹ AZ DEPT OF WATER RESOURCES. Prescott AMA Annual Supply and Demand Data, Historic Template and Summary. Accessed June 29, 2021 from <http://infoshare.azwater.gov/docushare/dsweb/Get/Document-10673/Prescott%20AMA%20Historic%20Template%20and%20Summary%20for%20web.xlsx>.

¹⁰ AZ DEPT OF WATER RESOURCES. Arizona Department of Water Resources Withdrawal and Recovery Grouped by Authority Including Detailed Well Pumpage for AMAs or Outside AMAs PRESCOTT AMA for 2019. Accessed June 29, 2021 from <http://www.azwater.gov/querycenter/query.aspx?rptsessionid=80D992FD195E8E55E0534C64850A4860>

¹¹ Arizona Administrative Code, R12-15-722(H), Consistency with Management Goal.

¹² Arizona Administrative Code, R12-15-721(C), Consistency with Management Plan.

Chapter 86. This does not apply to exempt wells. Within that 21-year time frame, approximately 5,500 exempt wells (Figure 1) have been authorized in the Prescott AMA¹³. Also, during that same time period, the Yavapai County Assessor's database shows that more than 4,500 new lots have been created outside of existing water service boundaries (Figures 2a and 2b).

Prescott AMA Water Providers

The water supply for a subdivision served by a water provider in the Prescott AMA can come from either a renewable source such as surface water or a reclaimed water source. If groundwater is used to prove physical availability, the groundwater must be made consistent with the AMA's management goal through the use of either extinguishment credits granted from the extinguishment of grandfathered groundwater rights or a groundwater allowance¹⁴. These water sources are scarce, expensive and increase the cost of housing by \$1,441 to \$2,401 per unit in Prescott, not including infrastructure fees¹⁵. Currently, private market prices for an AWS per home in Prescott Valley are approximately \$5,000 - \$8,000 (J. Munderloh, personal communication, July 21, 2021). As a result, since 1999 only 362 lots in Prescott Valley have been approved through the certificate of AWS (CAWS) process and only because the applicant purchased reclaimed water rights. During that same time, unincorporated areas next to Prescott Valley have seen more than 2,100 new lots as a result of lot splits (Figures 3a and 3b). In comparison, the City of Prescott has operated under a Designation of AWS since 1999. In order for a new development to make use of the City of Prescott's designation, there must exist a written commitment of service from the water provider. The development of additional lots has been primarily within existing, approved plats or based on the use of renewable supplies (surface and reclaimed supplies).

Chino Valley, a small but growing utility with a current lack of widespread water infrastructure, has seen numerous lot splits and dry-lot subdivisions since 1999. Lot splits requiring exempt wells are increasing the demand on the aquifer serving the Little Chino subbasin. The costs of renewable water supplies, along with the administrative costs of obtaining a Certificate of AWS adds disincentives to planned developments and generally pushes developers and property owners toward dry lot subdivisions or lot splits (Mark Holmes, personal communication, August 5, 2021).

Conclusion: It is reasonable to assume that the Legislature intended exempt wells be allowed for the development of *rural* lots that existed when the 1980 Groundwater Management Act

¹³ AZ DEPT OF WATER RESOURCES. GROUNDWATER, PERMITTING AND WELLS. Accessed August 4, 2021 from <http://new.azwater.gov/permitting-wells/wells-data>

¹⁴ Arizona Administrative Code, R12-15-726, Prescott AMA Calculation of Groundwater Allowance and Extinguishment Credits

¹⁵ Prescott City Code. 3-14-12, Development Fees for Water System Impacts.

(Act) was created. This allowed an equal application of the law to all landowners. However, since 1999, with land developers avoiding development within existing service areas and the proliferation of dry-lot subdivisions, exempt wells are now the third largest water user in the Prescott AMA with no consumer protection for exempt well owners. Lots should not be split into countless smaller properties for further development. New lots, whether created via lot splits or through a formal subdivision process, should face equal application of the AWS Rules. The AWS Program is for the purpose of consumer protection. The proliferation of lot splits creates the expectation that development will occur and be granted, what is in practice, a groundwater allocation in the form of exempt wells. This is contradictory to the premise of consumer protection.

Recommendation: Engage with the Arizona Department of Real Estate to require lot splits and dry-lot subdivisions in the Prescott AMA to follow the same AWS rules as other subdivisions. The definition of a subdivision, as defined in A.R.S 32-2101(57) could be revisited. Consumer protection provided from an AWS should apply on an equal basis for all landowners, current and future.

A.R.S. § 45-454 Exemption of Small Non-Irrigation Wells; Definitions

A.R.S. § 45-454 prohibits drilling an exempt well on land if any part of the land is within one hundred feet of the operating water distribution system of a municipal provider with an assured water supply designation within the boundaries of an active management area established on or before July 1, 1994. The Director may issue an exemption from this prohibition if the total capital cost and fees for connecting to the operating water distribution system exceed the total capital cost and fees for drilling and fully equipping an exempt well.

The final actual cost of drilling and fully equipping an exempt well may not equate to the submitted cost estimate for the purpose of obtaining an exemption from ADWR.

Recommendation: Amend A.R.S. § 45-454(D) to require all new wells within a municipal or private water company service area in the Prescott AMA to meet AWS requirements.

A.A.C. Title 12, Chapter 15, Section 1302 Well Spacing Requirements

A municipal provider may not drill a new non-exempt well if after the first five years of operation it is shown that it will cause to exceed 10 feet of additional drawdown on water levels at neighboring wells.

Due to the proliferation of exempt wells in the Prescott AMA additional costs are incurred in siting public water service or recovery wells by water providers. The current regulation provides exempt wells a protection from new non-exempt wells when there is no protection from exempt wells for municipal providers that provide services to existing customers and are trying to be compliant with the Management Plan and Goal.

Recommendation: Provide an exemption for municipal providers in the Prescott AMA from the requirement of not causing additional drawdown from new service area wells where exempt well owners within the service area have the ability to connect to the existing service provider water system but choose not to do so. If not in the service area and the well is impacted, the provider may drill the well if it offers the option to supply water to the existing exempt well owner at the current rate.

DRAFT

Appendix

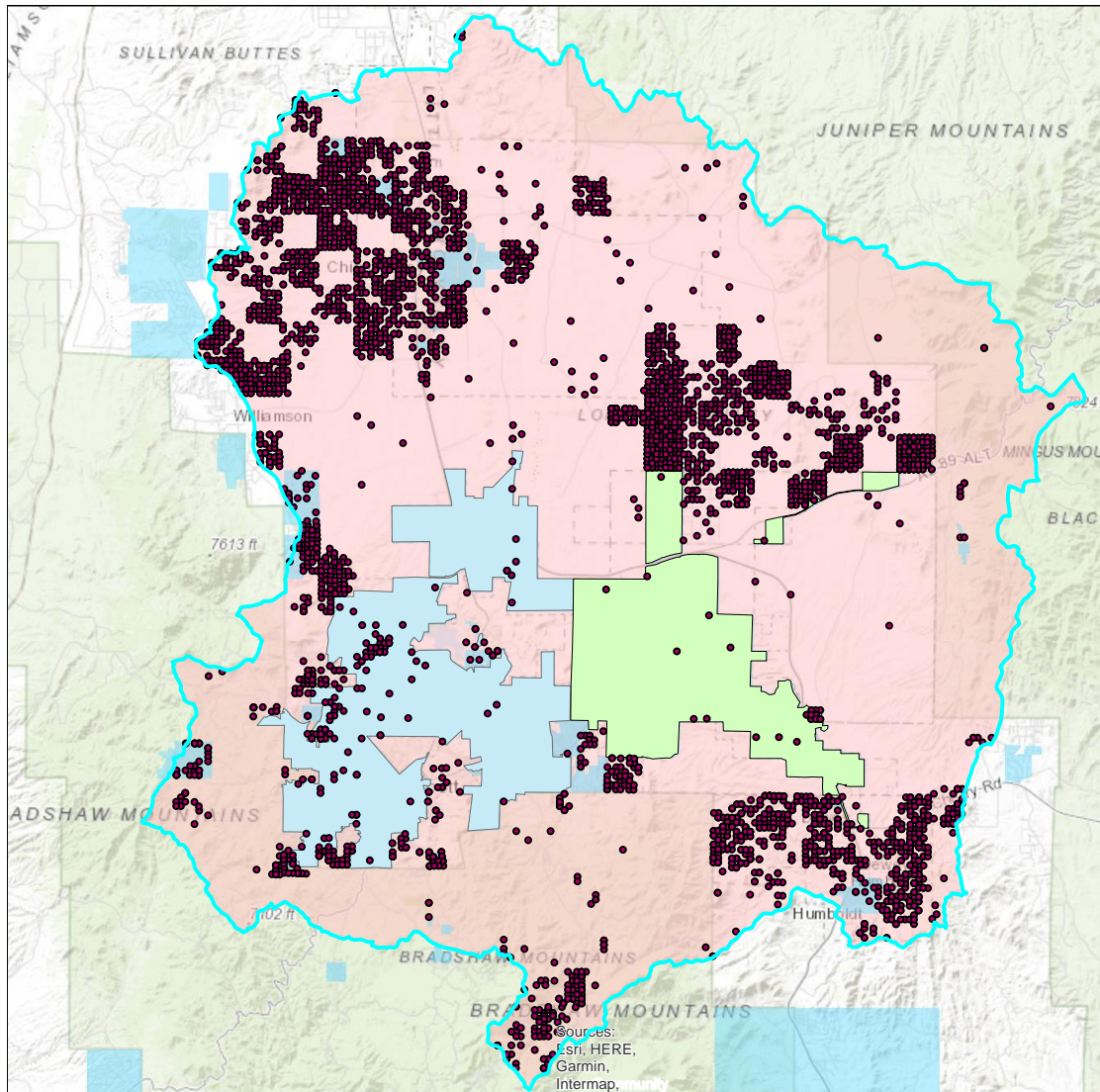
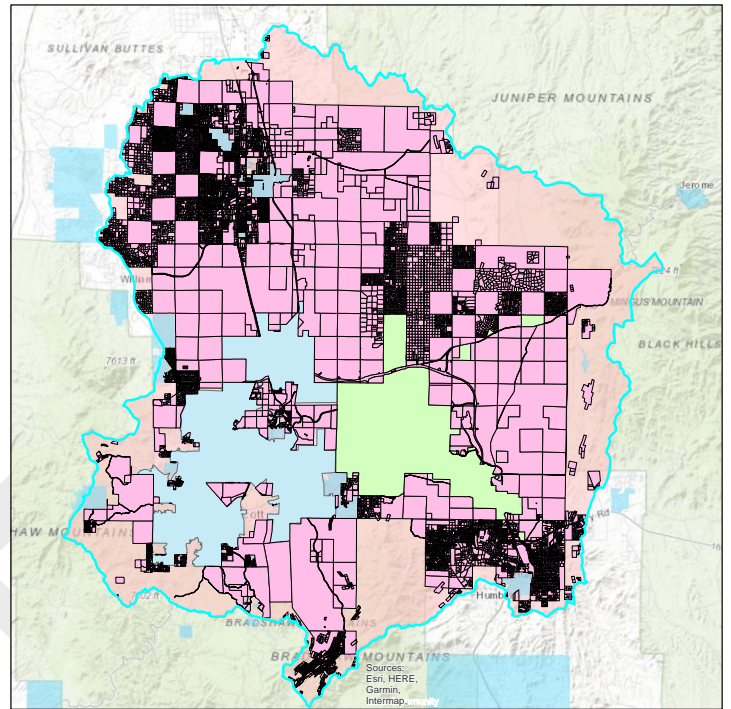
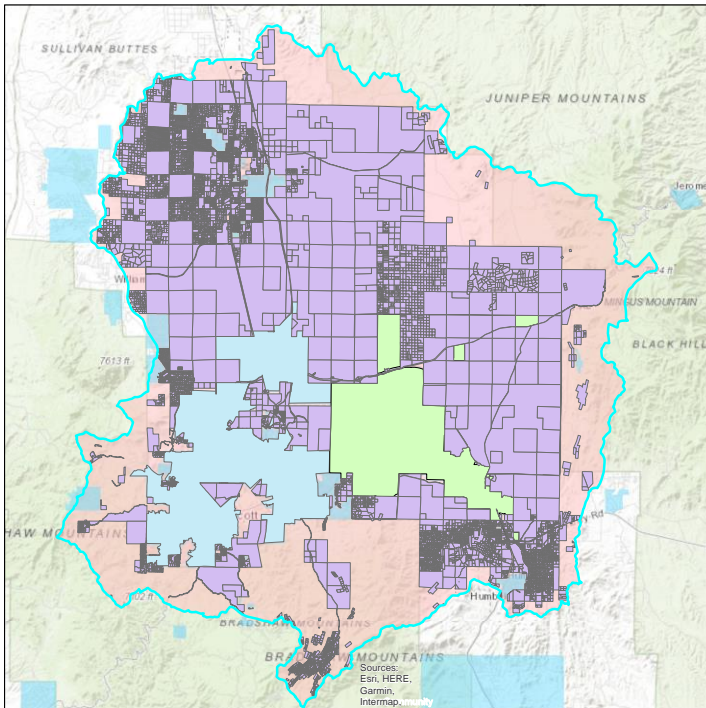


Figure 1. Location of 5,500 exempt well permits issued since 1999 in the Prescott AMA

Brown Dots: Exempt well permit locations

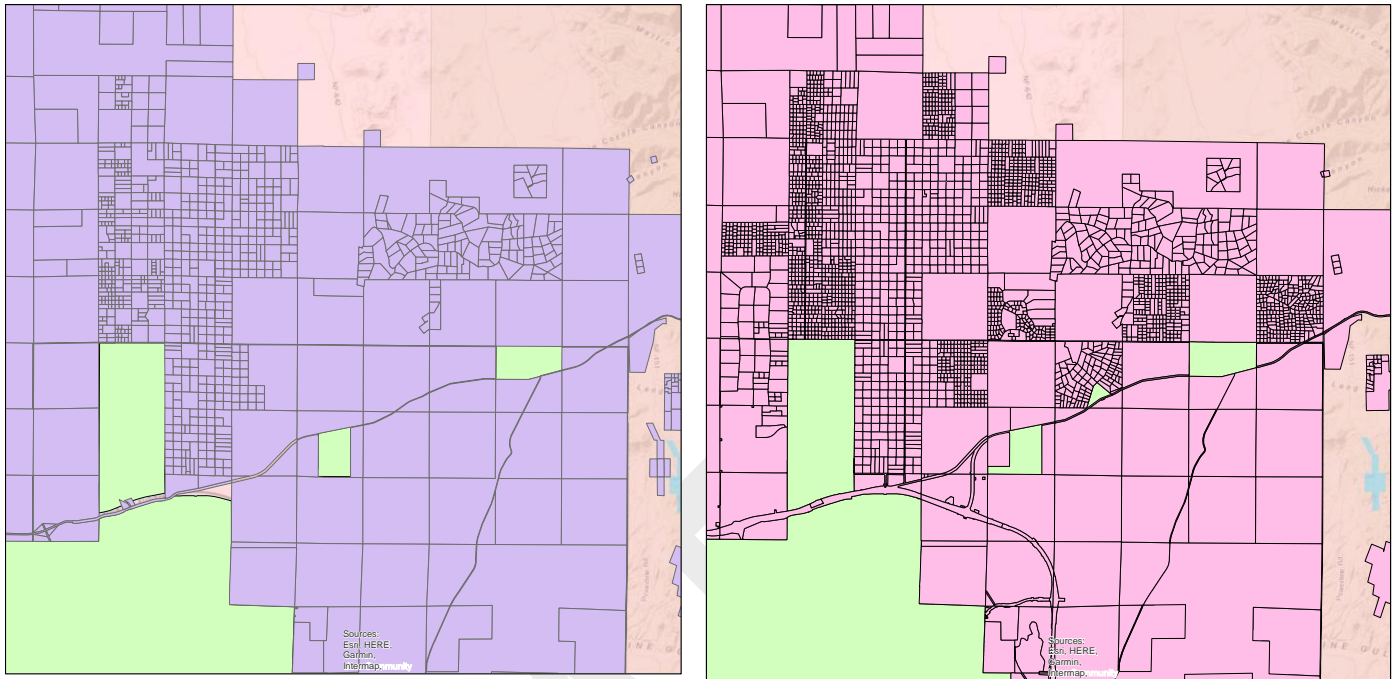
Pink Area: Prescott AMA

Blue and Green Areas: Community Water Systems



Figures 2a and 2b. Prescott AMA lot split and dry-lot subdivision parcels created since 1999. Parcels not within a water service area, year 2000 on left, year 2021 on the right. Addition of 4,500 parcels created since Prescott AMA was declared to be mining groundwater.

Blue and green Areas: Community Water Systems



Figures 3a and 3b. Parcels created since 1999 located adjacent to and Northeast of Prescott Valley (year 2000 on left, year 2021 on right). Addition of over 2,100 new groundwater parcels created outside of but near Prescott Valley while no new subdivisions created in Prescott Valley (based on new groundwater) during same time frame.

Green Area: Community Water Systems service areas

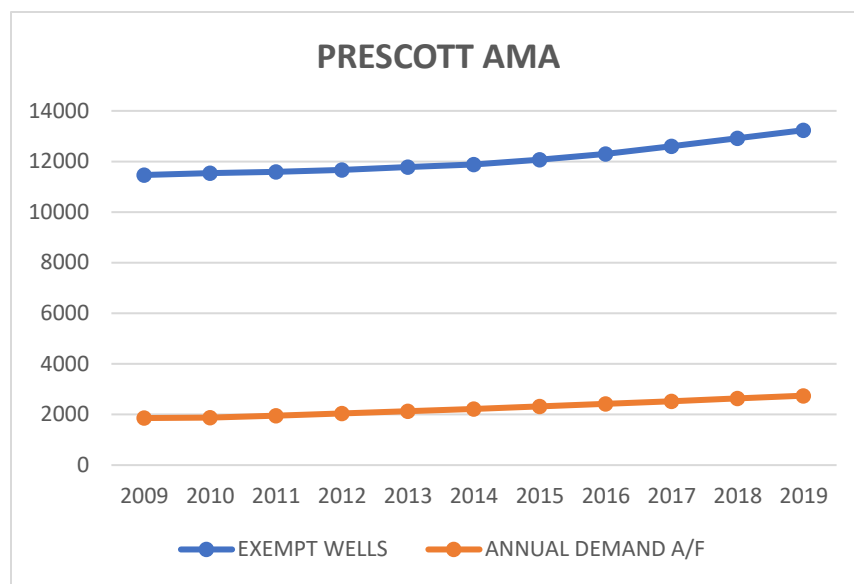


Figure 4. Number of exempt well permits and annual water demand by exempt wells for past ten years.
From ADWR infoshare: <http://infoshare.azwater.gov/docushare/dsweb/Get/Document-10673/Prescott%20AMA%20Historic%20Template%20and%20Summary%20for%20web.xlsx>.